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EXAMINER

LE, UYEN CHAU N

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/831,792

Applicant(s)

ROYER, GUILLAUME

Examiner

Uyen-Chau N. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Prelim. Amdt/Amendment

1. Receipt is acknowledged of the Amendment filed 13 September 2004.

Claim Objections

2. Claims 8 and 24 are objected to because of the following informalities:

Re claim 8, line 4: Substitute "the opening" with -- an opening --.

Re claim 8, line 6: Substitute "it" with -- the adhesive rectangle --.

Re claim 24, line 3: Delete "(A)" because there is no "(B)".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-3, 6-7, 16-18 and 21-23 remains rejected under 35 U.S.C. 102(e) as being anticipated by Isaacson et al (US 5,708,419).

Re claims 1-3, 6-7, 16-18 and 21-23: Isaacson et al discloses a self-adhesive electronic circuit including a planar base 26 having first and second base surfaces, an antenna 22 attached on the first surface of the base 26, a chip 14 connected to the antenna 22, a double faced adhesive 94 having first and second adhesive surfaces, wherein the first adhesive surface is glued on one of the base surfaces and the second adhesive surface forms an outward adhesive surface of the self-adhesive electronic circuit (i.e., the surface which is adhered to housing 92) (fig. 8; col. 9, line 58 through col. 10, line 25); wherein the chip 14 is glued on the first surface of the base and is connected to the antenna by connection wires 44, the wires 44 and the chip 14 being covered with a drop of resin 45 (col. 9, lines 20-33); wherein an etched surface of the chip 14 faces the first surface of the base, and the chip 14 is connected to the antenna by welding beads/pads [38, 40, 42]; wherein the base 26 is made of a flexible sheet (col. 5, lines 25+); wherein the surface of the base 26 which does not receive the double faced adhesive is provided to receive printing of a pattern (e.g., cover label 96), of a text or of a code (fig. 8; col. 10, lines 4+); the double-faced adhesive 94 having an opening/cutout, wherein at least a portion of the antenna 22 is disposed in the opening/cutout (fig. 8); the electronic chip 14 disposed at least partially in the opening/cutout and electrically coupled to the antenna 22; wherein the electronic chip is spaced from and does not contact the double faced adhesive (see fig. 8); wherein the double faced adhesive comprises a double faced adhesive tape (col. 10, lines 15+).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-5 and 19-20 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Isaacson et al in view of Launay (US 6,111,303). The teachings of Isaacson et al have been discussed above.

Re claims 4-5 and 19-20: Isaacson et al have been discussed above but fails to teach or fairly suggest that the chip is placed in a slot made through the base, the chip is connected to the antenna by welding beads located in connection slots going through the base.

Launay teaches a chip 9 being placed within a cavity/slot made through a base 1 having a surface 2; the chip 9 connecting to an antenna 4 via connection slots through the base 1 (fig. 1; col. 3, line 22+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Launay into the an electronic circuit as taught by Isaacson et al in order to provide Isaacson et al with a more compact system wherein the thickness of the card being reduced due to part of the thickness of the chip is disposed within the base via the cavity/hole.

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7. Claim 8 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Isaacson et al in view of Vieilledent (US 4,701,236). The teachings of Isaacson et al have been discussed above.

Re claim 8, Isaacson et al have been discussed above but fails to teach or fairly suggest a method of manufacturing the self-adhesive electronic circuit, wherein the attachment of the double faced adhesive on the base includes the steps of: forming a rectangle of double faced adhesive including an opening, gluing the adhesive rectangle on a packaging protective film, ungluing the adhesive rectangle from the protective film, and assembling the adhesive on the base.

Vieilledent teaches a rectangular double-faced adhesive 1 provided with two protective layers 2, 3 including an opening 4; the protective layer 3 is moved and the tape 1 is glued to a base/film 5, then an IC chip 6 is mounted in a cavity 11 of the base/film 5 (figs. 2A-2D; col. 3, lines 10+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Vieilledent into the teachings of Isaacson et al because such modification would have been an obvious engineering variation, well within the ordinary skill in the art, for better handling a double-faced adhesive tape during manufacturing process (i.e., protective layers/films prevent the tape from being glued to an undesired component and can be removed/peel-off readily without damaging the adhesive tape), and therefore an obvious expedient.

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8. Claims 9-11 and 14-15 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Isaacson et al in view of Murohara (US 6,089,461). The teachings of Isaacson et al have been discussed above.

Re claims 9-11 and 14-15: Isaacson et al has been discussed above but fails to teach or fairly suggest that the thickness of the double faced adhesive is greater than or equal to the height of the electronic chip or the resin.

Murohara teaches a portion of an antenna 2 is disposed in the opening, which is filled with resin agent 4 and the thickness of adhesive agent 14 is greater than the height of the electronic chip 3 or the resin 4 (figs. 4-6; col. 4, lines 17-63).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Murohara into the teachings of Isaacson et al in order to improve the strength against bending and enhance the protection capability of the chip and/or antenna in the event the card is bended.

9. Claims 12-13 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Isaacson et al as modified by Murohara as applied to claim 9 above, and further in view of Launay (US 6,111,303). The teachings of Isaacson et al as modified by Murohara have been discussed above.

Re claims 12-13: Isaacson et al/Murohara have been discussed above but fails to teach or fairly suggest that the chip is placed in a slot made through the base, the chip is connected to the antenna by welding beads located in connection slots going through the base.

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Launay teaches a chip 9 being placed within a cavity/slot made through a base 1 having a surface 2; the chip 9 connecting to an antenna 4 via connection slots through the base 1 (fig. 1; col. 3, line 22+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Launay into the an electronic circuit as taught by Isaacson et al/Murohara in order to provide Isaacson et al/Murohara with a more compact system wherein the thickness of the card being reduced due to part of the thickness of the chip is disposed within the base via the cavity/hole.

10. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isaacson et al in view of Appalucci et al (US 5,142,270). The teachings of Isaacson et al have been discussed above.

Re claim 24: Isaacson et al have been discussed above and further disclose that the outward adhesive surface of the self-adhesive electronic circuit is adhered to the undersurface of the housing 92 (fig. 8; col. 9, lines 66-67), but is silent with respect to the undersurface of the housing is a non-planar surface.

Appalucci et al teaches a resonant tag circuit 10 comprises a base 12 having a first surface 16 and a second surface 18, a conductor 20 is attached to the first surface 16 of the base 12; an adhesive layer 34 having a first surface and a second surface, the first surface of the adhesive layer 34 is adhered to the surface 16 of the base 12, the second surface of the adhesive layer 34 forms an "outward" adhesive surface of the tag 10 and is covered with a removable liner 32; the liner 32 is removed prior adhering the "outward" adhesive surface of the tag 10 to a

surface of an article, wherein the surface of the article can be a non-planar surface (figs. 1 & 2; col. 4, lines 21-41 and col. 5, lines 53-60).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Appalucci et al into the system as taught by Isaacson et al in order to provide Isaacson et al with a reliable system which can be utilized on a non-planar surface. Furthermore, such modification would provide Isaacson et al with the ability for securing the tag to a non-planar surface, thus providing confidence to users in traveling (i.e., the users do not have to concern about loosing their luggage due to the luggage's tag falls off), and therefore an obvious expedient.

Response to Arguments

11. Applicant's arguments filed 13 September 2004 have been fully considered but they are not persuasive.

12. In response the Applicant's argument to "... the circuit of Isaacson does not include a double-faced adhesive which forms an outward adhesive surface of the circuit. The final product does not have an outward facing adhesive surface ... At no point in the process of Isaacson does a circuit exist which includes a double-faced adhesive forming an outward adhesive surface, as recited in claim 1" (p. 8, lines 3-18), the examiner respectfully requests the Applicant to review Isaacson et al wherein the adhesive tape 94 is a double sided tape (col. 10, lines 15-17); one side is adhered to one of the surfaces of the base 26, which has the chip 14 and antenna 10 attached thereto, and the other side forms an "outward" adhesive surface, which is adhered to the housing 92 (see fig. 8; col. 9, line 66 through col. 10, line 5). The Applicant has also agreed on this

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subject matter where the adhesive tape 94 "could conceivably form an "outward" surface for the circuit has already been adhered to an external housing" (p. 8, lines 14-15). Since neither the specification or claims have a clear definition of an "outward" surface (i.e., the "outward" adhesive surface can or cannot be adhered to anything; or what does the "outward" adhesive surface utilize for, etc.), and the "double faced adhesive" is defined as "a segment of a plastic tape conventionally processed to be adhesive on its two surfaces" (specification: p. 2, lines 32+), which is coincided with the adhesive tape 94 of Isaacson et al, it is submitted that, given the broadest reasonable interpretation, Isaacson et al meets the claimed invention (see the rejection above).

13. In response the Applicant's argument to "neither Isaacson nor Murohara discloses or suggests an electronic circuit which includes a double-faced adhesive having ... a second surface forms an outward adhesive surface of the electronic circuit" (p. 10, lines 1-12), the examiner respectfully submits that the rejection based on the combination of Isaacson et al in view of Murohara is only for the thickness of the double faced adhesive. Accordingly, the claimed limitation, given the broadest reasonable interpretation, Isaacson et al in view of Murohara meets the claimed invention (see the rejection above).

For the reasons stated above, the Examiner believes that a proper prima-facie case of obviousness has been established. Therefore, the Examiner has made this Office Action final.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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The patents to Pendse (US 5376588 A); Yamaguchi et al (US 6665931 B2); Hara et al (US 4727246 A); Hara (US 4797542 A) Pendse (US 5376588 A); Jacobsen et al (US 6031458 A); Conwell et al (US 6163260 A) are as of interest and illustrate to a similar structure of an apparatus and system of a self-adhesive electronic circuit.

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen-Chau N. Le whose telephone number is 571-272-2397. The examiner can normally be reached on Mon-Fri. 5:30AM-2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL G LEE can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Uyen-Chau N. Le

November 21, 2004



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